cemented by calcite; the grains are well-rounded and well-sorted with grain sizes ranging from medium sand to granule sizes. Based on the areal distribution of the sedimentary structures (e.g., pin stripe lamination, high angle cross bedding), the occurrence of terrestrial gastropod shells and the correlation with almost identical sandstones in the Mediterranean we conclude an eolian origin and a most likely Pleistocene age of these sandstones.

Several vertebrate tracks and trackways have been found in these sandstones. To our best knowledge, this is the first report of vertebrate trackways in Pleistocene sandstones of the Aegean. However, comparable trackways, both in age and size, have been reported on the islands of Mallorca and Sardinia (Fornos et al. 2002, Fanelli et al. 2007). Tracks have been found on bedding surfaces and in cross-section, where tracks are concentrated along certain horizons; the tracks are about 11 cm wide and 4 cm deep. On bedding surfaces at least two distinguishable trackways are recorded. Due to overlapping tracks and weathering, the differentiation between manus and pes impressions is challenging. This, and the relatively short length of individual trackways - the longest traceable trackway is only about 1.50 m long - make stride and pace measurements difficult. The track morphologies (e.g., preservation of a cloven hoof track) and trackway sizes indicate an artiodactylous mammal with the size of a goat, deer or antelope or a comparable sized animal as trackway producer, whereas goats per se are not likely to be the originator of the tracks, as goats were introduced to the Aegean islands by man. It is most likely that the tracks were made by fallow deer, whose remains were also found during the archaeozoological rescue excavation in the Antiparos Cave (Psathi 2006). Also, if we expect the sea level to be approx. 125 meters below the modern day mean sea level during the last glacial maximum in the late Pleistocene (Yokoyama et al. 2000), various land bridges would have developed (Kapismalis 2009) allowing faunal interchange with other Cycladic islands.

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Reconstruction of the autochthonous Upper Eocene depositional environment in the Bad Hall area (Upper Austria)

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Sandstones of the Upper Eocene are the main oil bearing strata within RAG's Upper Austrian concession area. Knowledge of their lateral extent and vertical stacking pattern is of crucial interest for a successful expoloration and production strategy. Facies distribution maps in a regional scale have been provided by L. Wagner in 1980. Recent drilling activities revealed the necessity to elucidate the depositional environment and its extent in the Bad Hall area.

The herein proposed study is integrative in scale and disciplines. The main idea behind is the concept of „Dynamic Stratigraphy“. Examined key cores reveal facies associations, which are interpreted as river-dominated delta. An interpretation of the lateral extent and geometry of the Upper Eocene depositional environment is aided by seismic characterization, using ThinMAN™ broadband spectral inversion. Moreover the sedimentological analysis is supported by a detailed micro-paleontological (palynomophs and foraminifera) and petrographical study.

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Multi-Offset Ground Penetrating Radar (GPR) Investigations of a Snow Pack

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The water equivalent of a snow pack is a crucial information regarding hydrological and glaciological studies. The classic way to gain this information are direct, manual snow density measurements in a snow pit. In the case of a several meters thick snow cover, digging a snow pit is time consuming, extensive work. Caused by enhanced surface melting during summertime, most often a continuous, thick top ice cover evolves in the accumulation area of a glacier. In autumn, when the final field survey for the determination of the annual mass balance is held, this top ice cover represents a hard to penetrate layer. Most often snow density information is only measured for the autumn snow until the summer surface layer, because gathering deeper density information would demand an unreasonable, disproportional amount of work. Snow densities below the summer surface layer are estimated by a best guess.